TapIn

"Build a Digital Business Card"

TAP Expo

Pre-Survey

Scan QR code

TECHNOLOGY AMBASSADOR PROGRAM (TAP)

The Technology Ambassadors Program (TAP) aligns with GGC's four pillars

Scholarship

Leadership

Service

Creativity

This award-winning program also addresses a need to increase the number of students who persist in an IT major or minor, particularly those underrepresented in computing.

Our Goals for this Project

- Create a detailed Digital Business Card with general information that would be on a resume.

- Motivate individuals to use/engage with technology to benefit their future.

- Encourage individuals to continue working on their business card as they progress in their education.

"Forgot my resume.. No Problem!"

Cameron Ventimiglia

Courses Taken

- Programming Fundamentals
- Intermediate Programming
- Advanced Programming
- Advanced Databases
- System Analysis & Design
- Software Development 1
- Software development 2
- Software Testing & QA
- Professional Practice & Ethics
- Introduction to Networks
- Introduction to Programming

About Me

I am a student at Georgia Gwinnett College, and I am a senior majoring in Software Development. I started off college as a cell biology major, but that changed when I took a programming class. In the programming class, I realized that I really did not like biology anymore and that I wanted to progress further in software development.

Interesting Projects I have Worked On

Create an API that implements the category-partition method

The API we made allowed us to apply a testing method called the category-partition method to a JSON file submitted by a user. The JSON file contained information about function and its parameters. Our job was to parse this file and create all the possible combination of parameters for a given function. We did this by creating an algorithm that would populate a matrix with the correct combinations. Once this was done, the API would write contents to a text file and return it back to the user. For more information, visit our page: Category partition method API

Database that tracks a working train system

In this project, I worked with another classmate to design a database that stores information regarding a train system. It tracked information such as: the trains, their cargo, and even their destination.

Text-based Adventure Game Using Java

In this Project, I worked with a team to create a text-based adventure game designed by another team. This used a database to store information about new and returning players. It tracked each player's health, points, location items, and monsters defeated.

My Goals

- Get Job
- Finish school with GPA higher than 3.2
- Always try my best
- Improve python

My Contact Information

"Take your experience and store it in your pocket"

About Workshop

In this workshop, you will be creating a digital business card that you will link to an NFC chip (QR code if not in person) that you can share with anyone you come across in the future.

Technology used:

- Near Field Communication (NFC) Chips

What you will learn:

- What NFC chips are and how they work
- HTML, CSS, JavaScript arrays and for loops

NFC

Near Field Communication

Unlike Wi-Fi or Bluetooth, NFC is limited to an extremely short range.

An example of this kind of technology would be apple pay.

(radio frequency identification)
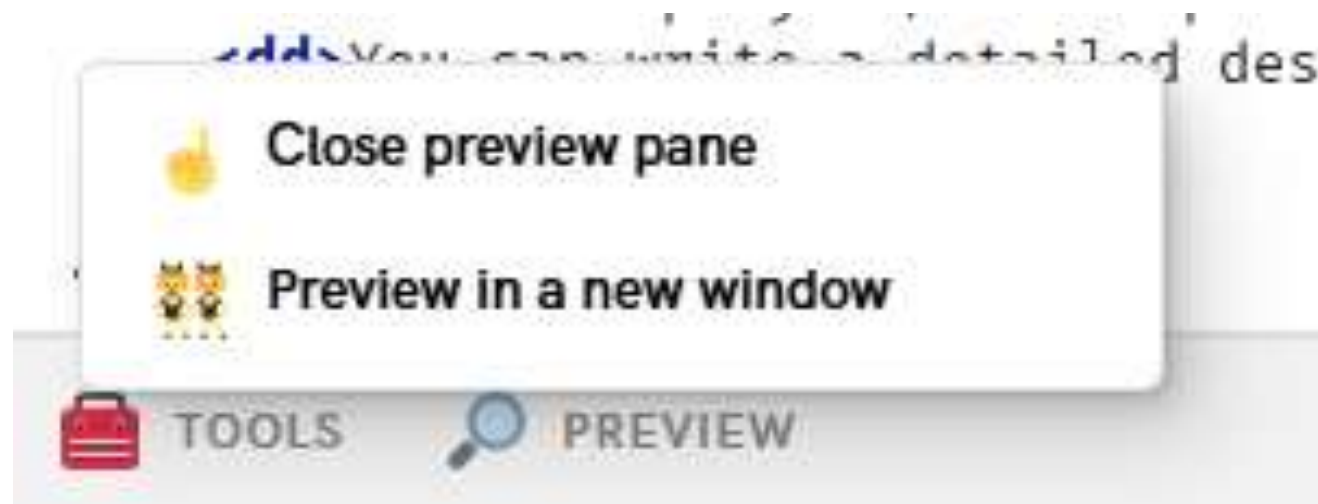
Navigate To Our GitHub Repository

https://github.com/TechAmbassadors-GGC/TapIn

QR code for Pre-survey

Getting Started

- Click on this following link https://glitch.com/edit/#!/tapin

- Click on the "Remix to Edit" button on the top right of the page

- Navigate to index.html to start working on your digital business card

- Click "Preview" button at the bottom of the page to preview your business card

Preview your card!

You can open your card in a new window for a full view

What is HTML?

HTML stands for Hypertext Markup Language

It is the standard language for creating documents that can be displayed in a web browser.
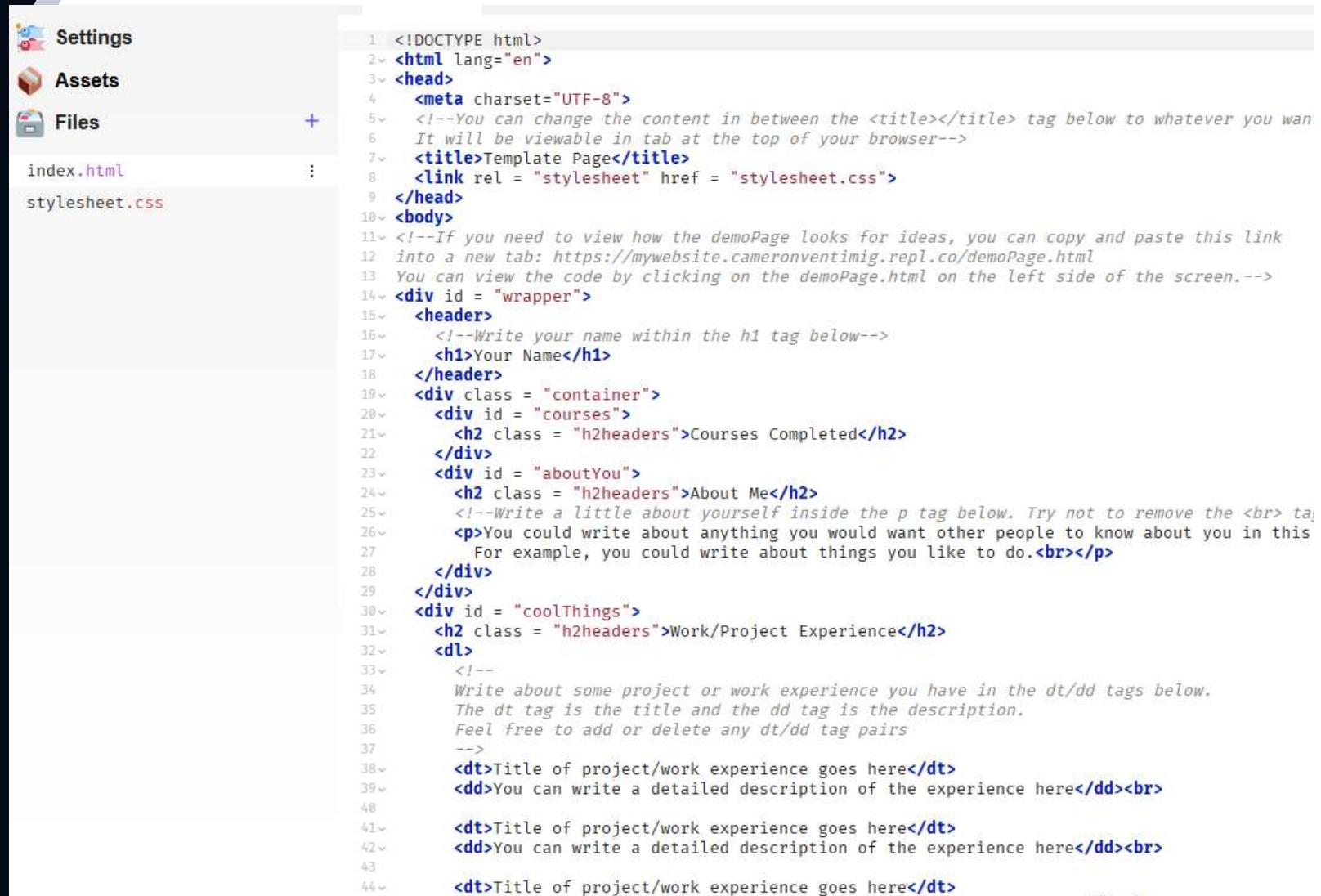
Structure of an HTML Document
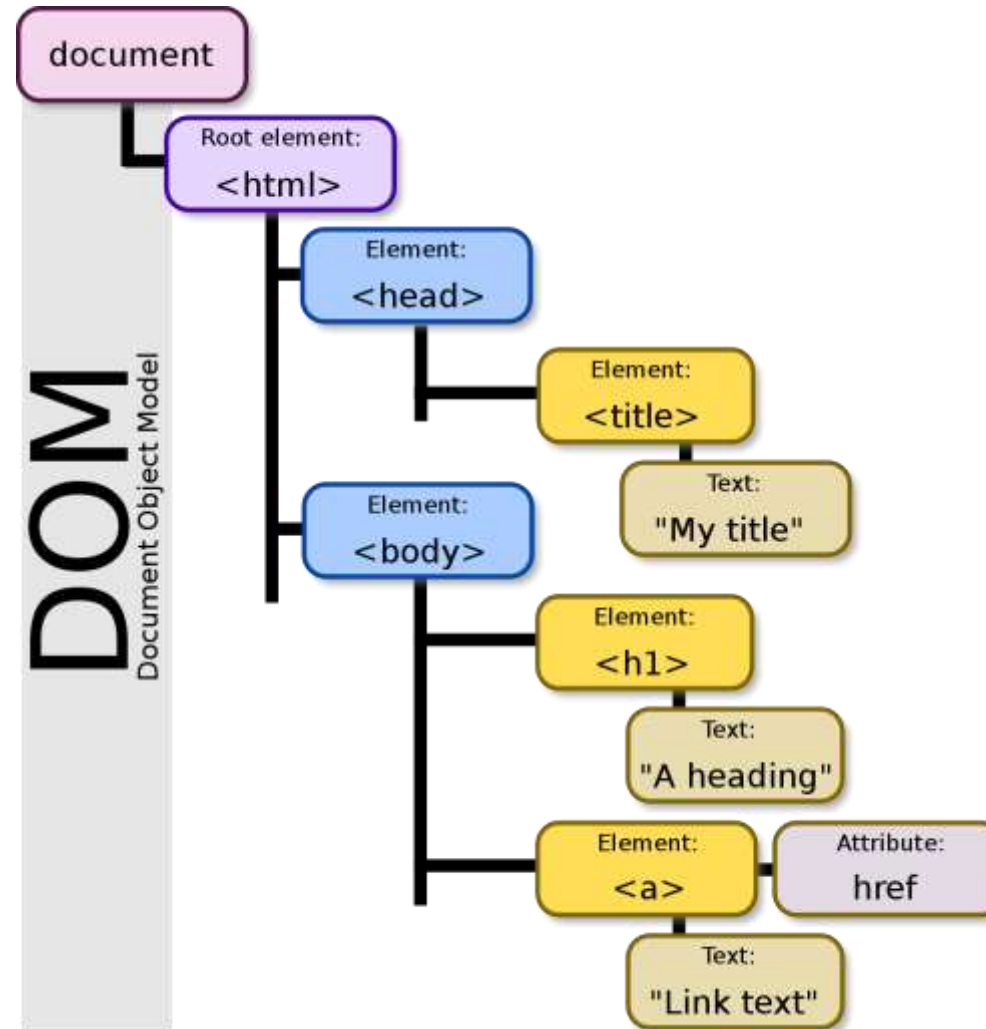
Key points of an HTML file

There are two main section inside of an HTML file. They are the head and body sections.

- The head section contains information **about** the webpage.
- An example would be the title of the page and the location of a stylesheet used in for the file.

- The body section contains text and elements that are displayed **on** the web page.
- Everything you see on the page is written inside of the body section of the file.

Open HTML File

- Elements have an opening tag <> and a closing tag</>

- Inside of <title></title> write what you want your card to be called. It will appear inside of the tab at the top of your browser.

- In order to add your name to the main heading, you will need to change the contents in between <h1></h1>

Edit your file

- To change the information about yourself, you will need to change the contents between <p></p>

- To change the title of your project or work experience, you will need to change the contents between the <dt></dt> tags.

- To change the description of the project or work experience, you will need to change the contents between the <dd></dd> tags.

```
1   <!DOCTYPE html>
2   <html lang="en">
3   <head>
4       <meta charset="UTF-8">
5       <!--You can change the content in between the <title></title
6       It will be viewable in tab at the top of your browser-->
7       <title>Template Page</title>
8       <link rel = "stylesheet" href = "stylesheet.css">
9   </head>
10  <body>
11  <!--If you need to view how the demoPage looks for ideas, you
12  into a new tab: https://mywebsite.cameronventimig.repl.co/dem
13  You can view the code by clicking on the demoPage.html on the
14  <div id = "wrapper">
15      <header>
16          <!--Write your name within the h1 tag below-->
17          <h1>Your Name</h1>
18      </header>
19      <div class = "container">
20          <div id = "courses">
21              <h2 class = "h2headers">Courses Completed</h2>
22          </div>
23          <div id = "aboutYou">
24              <h2 class = "h2headers">About Me</h2>
25              <!--Write a little about yourself inside the p tag belo
26              <p>You could write about anything you would want other
27                  For example, you could write about things you like to
28          </div>
29      </div>
30      <div id = "coolThings">
31          <h2 class = "h2headers">Work/Project Experience</h2>
32          <dl>
33              <!--
34              Write about some project or work experience you have in
35              The dt tag is the title and the dd tag is the descripti
```

Modify contact section

- To add a link, you need to change the contents inside of the <a> tag.
- Href refers is the website you want to link to.
- To make the URL take the form of an image, you will add an <img> tag in between of the <a> tag.
- src refers to the link to the image you want to use.
- Alt is a description for people who are unable to view your page due to physical impairments

```
47      </dl>
48    </div>
49    <div id = "contact">
50      <h2 class = "h2headers">My Contact Information</h2>
51      <!--In the <a></a> tag below, you can provide the links to the various social
52
53      Step 1: Add the link to the page you want the user to visit.
54      The href section is where you will put the link to the social media page.
55
56      Step 2: Add the link to the image addess inside of the src section of the <a><
57      The src section is where you put the link to the image you want to use.
58      You can find some images we have stored at this link:
59      https://github.com/TechAmbassadors-GGC/TapIn/tree/main/resources/Tap%20In/imag
60      To use an image, simply click on the picture file you want, right click the pi
61      Next, paste what you copied in the src part of the a (anchor) tag below.
62
63      Step 3: Add the alternative text that describes the page the user is visiting.
64      The alt section is a name you put for people that are impaired and cannot view
65
66      You can find an example link on line 51 of the demoPage.html on the left side
67      -->
68      <a href = "" target="_blank"><img class = "image" src = "" alt = ""></a>
69    </div>
70    <div id = "goals">
71      <h2 class = "h2headers">My Goals</h2>
72      <ul id = "goalsList">
73        <!--In the section below, write about the goals you want to achieve before y
74        You can add more list items by adding another <li></li> tag pair. You can al
75        <li>Example: Finish with a GPA higher than 3.4</li>
76        <li>Goal 2</li>
77        <li>Goal 3</li>
78      </ul>
79    </div>
80  </div>
81
82  <!--In the section below, you will input the courses you have taken specific to yo
83      You will enter these courses inside the courses array below.
84      All you have to do is remove the Course Name 1 with the Course name you want to
85      example: Course Name 1 would be changed to Digital Media.
```

```
<a href = "" target="_blank"><img class = "image" src = "" alt = ""></a>
```

Get links for file

- \<a>\

- Anchor Element

- Specifies a hyperlink reference (href) to a file
  - Text between the \<a> and \ is displayed on the web page. \Contact Us\

- href Attribute
  - Indicates the file name or URL

What are Data Structures in Programming?

- A data structure is internal storage a programmer can use to store, manipulate or access data inside of their program.

- Popular data structures in programming:
  - **Arrays**
  - ArrayLists
  - Queues
  - Stacks
  - Maps
  - Trees
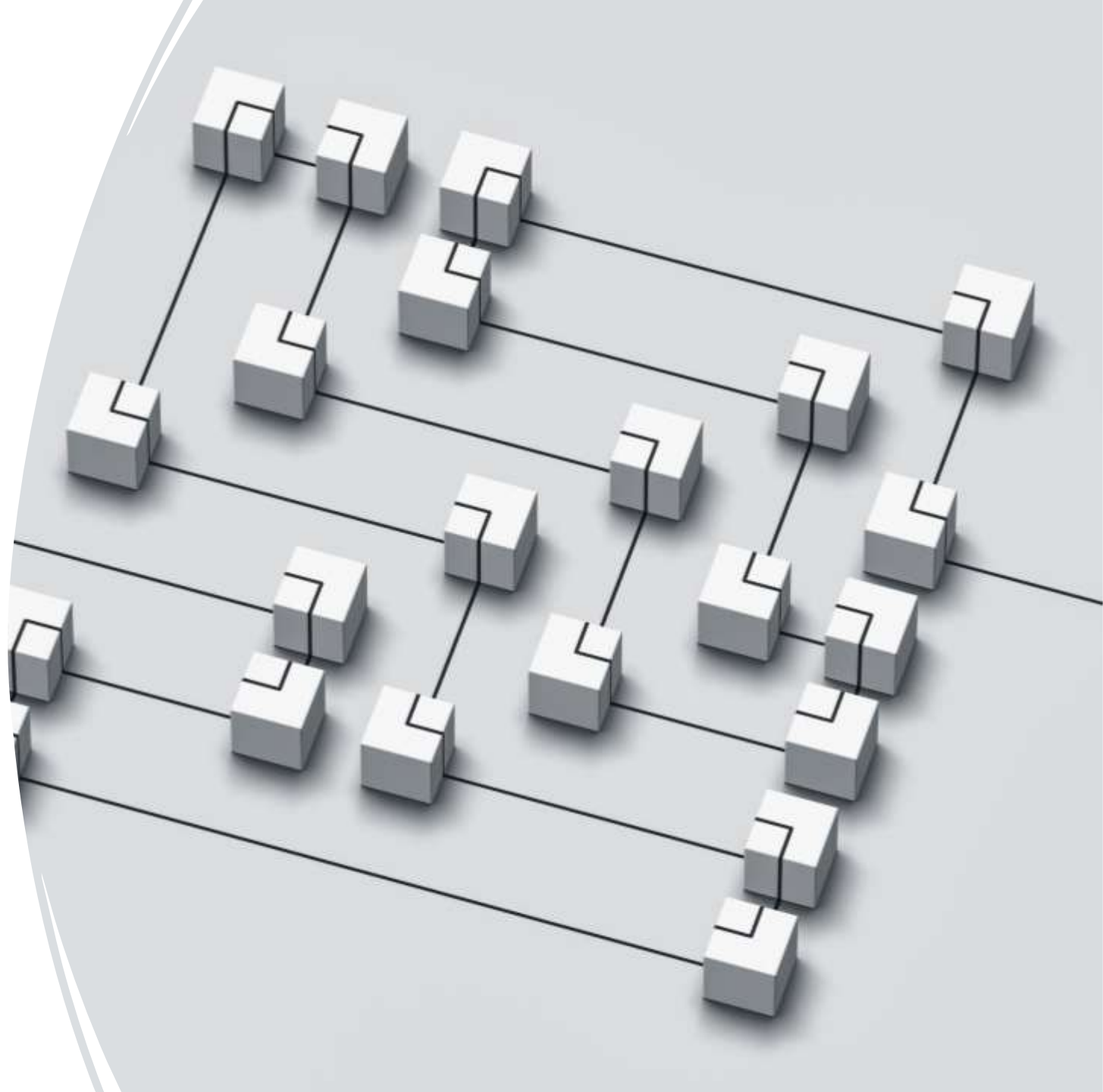
What is a JavaScript Array?

- An array is an object that can store multiple values regardless of their data type. It is often used when we want to store a list of elements and access them by a single variable.

- An example of how an array is created:
  - **var** house = ["bedroom", "kitchen", "garage"];
  - house is the array variable name
  - "bedroom", "kitchen", and "garage" are the elements of the house array.

Fill in the array

Remove the placeholder elements and replace them with some courses you have completed.

```
        </ul>
    </div>
/div>

!--In the section below, you will input the courses you have take
   You will enter these courses inside the courses array below.
   All you have to do is remove the Course Name 1 with the Course n
   example: Course Name 1 would be changed to Digital Media.
   You can look at the demoPage.html file to see how to change it.
   If you want to add another course, you need to add a comma to th
script>
 let courses = [
    "Course Name 1",
    "Course Name 2",
    "Course Name 3"
 ];
 function myCourses() {
    let courseCompleted = document.getElementById("courses");
    let courseList = "";
    for (let i = 0; i < courses.length; i++) {
      courseList = courseList + `<li>${courses[i]}</li>`;
    }
    courseCompleted.innerHTML += `${courseList}`;
 }
 myCourses();

/script>
/body>
/html>
```

Cascading Style Sheet (css)

- This is where most of the visual style of the webpage is kept.

- Using html you can change colors, add pictures, reposition elements in the page, etc......

Color Wheel!

Changing the color of each section

- If you want to change the color of each section, you will need to open the css file called "stylesheet.css".
- Inside of this file you will need to change the background-color of each section.
  - You can use a select amount of named colors or hexadecimal values
  - Hexadecimal values have a certain syntax that needs to be followed:
    - Starts with a #
    - Can only contain six digits
    - Can only contain numbers 0-9 and letters a-f
    - Good example: #123abc
    - Bad example: !123ht32
  - You can use a color picker to help generate these values for you.
  - https://www.w3schools.com/colors/colors_picker.asp (search w3 schools color picker in google)

Example of what to change in the CSS file

```css
27   #courses {
28       width: 300px;
29       height: 310px;
30       border-right: 5px solid ■ green;
31       float: left;
32       position: relative;
33       background-color: ▢ aquamarine;
34       overflow: auto;
35       padding-left: 10px;
36       padding-bottom: 10px;
37   }
```

- You would want to change the background-color on line 33 to any color of your choosing.
  - If you need help, let us know.

- Does everything look the way you want?
- Do the links work when pressed?
- (Troubleshooting...)

Finalize html

Connect Resume to NFC

- Instructions:
  - Step 1: download NFC app that will read and write the nfc chip
  - Go to write
  - Enter the entire url link
  - Put NFC chip near the device and press write
  - Should say NFC sucessful!

Test your card!

Post-Survey

Scan QR code

QUESTIONS?

Thank You!